(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 24 February 2005 (24.02.2005)

PCT

(10) International Publication Number WO 2005/016932 A1

C07D 495/04, (51) International Patent Classification7: A61K 31/381, A61P 31/14

(21) International Application Number:

PCT/US2004/026504

(22) International Filing Date: 13 August 2004 (13.08.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/494,789

14 August 2003 (14.08.2003) US

(71) Applicants (for all designated States except US): WYETH [US/US]; Five Giralda Farms, Madison, NJ 07940 (US). VIROPHARMA INCORPORATED [US/US]; 405 Eagleview Boulevard, Exton, PA 19341 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): GOPALSAMY, Ariamala [US/US]; 1106 Devon Court, Mahwah, NJ 07430 (US).

(74) Agents: MANDRA, Raymond, R. et al.; Fitzpatrick, Cella, Harper & Scinto, 30 Rockefeller Plaza, New York, NY 10112-3801 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PYRANOBENZOTHIOPHENE DERIVATIVES TO TREAT INFECTION WITH HEPATITIS C VIRUS

(57) Abstract: The invention is directed to a compound of the formula: (I) wherein substitutions at \mathbb{R}^1 , \mathbb{R}^2 , \mathbb{R}^3 - \mathbb{R}^{12} , and Y are set forth in the specification; pharmaceutical compositions comprising said compound, methods of treating or preventing a Hepatitis C viral infection in a mammal comprising contacting the mammal with an effective amount of said compound or pharmaceutical compositions including said compound and methods of inhibiting replication of a Hepatitis C virus comprising contacting the HCV virus with an effective amount of said compound or pharmaceutical compositions including said compound.